00AB070A/ALBRP175USA

### REMARKS

Claims 1, 2, 4–13 and 15-21 are currently pending in the subject application and are presently under consideration. The Examiner's indication that claim 18 would be allowed if recast in independent form to include limitations of the respective base and intervening claims is appreciated. However, applicant's representative believes such amendment is not necessary in light of the below noted deficiencies of the cited art vis a vis the pending claims. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

#### T. Rejection of Claims 1-2, 4-5 and 7-9Under 35 U.S.C. §102(e)

Claims 1-2, 4-5, 7-10, 15-17 and 19-21 stand rejected under 35 U.S.C. §102(e) as being anticipated by Parker et al. (U.S. 6, 112, 312). This rejection should be withdrawn for at least the following reasons.

> A single prior art reference anticipates a patent claim only if it expressly or inherently describes each and every limitation set forth in the patent claim. Trintec Industries, Inc. v. Top-U.S.A. Corp., 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); See Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the ... claim. Richardson v. Suzuki Motor Co., 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The subject invention generally relates to test systems and in particular to a test executive software system and a method for developing tests to verify the functionality of industrial control modules. To this end, independent claim 1 describes a system that tests industrial control modules, comprising: an instrument that provides input stimulus and measurement readings; a test component that provides program flow to the input stimulus and measurement readings of the at least one instrument; an instrument component that is communicatively coupled to the instrument; the instrument component has a virtual mode that runs the test component with the instrument in

simulation mode; and the instrument component further comprising a normal mode for running the instrument in live mode.

Parker et al. relates to a method for generating functional tests for a microprocessor having several operating modes and features. A test code file is produced by an assembler and can be executed by either (i) a model of the microprocessor or (ii) a hardware implementation of the microprocessor. On page 3 of the Office Action it is contended that Parker et al. shows all the inventive features of the applicants' claimed invention. Applicant's representative respectfully avers to the contrary. Claim 1 of the subject invention discloses an instrument that provides input stimulus and measurement readings. At the cited portion (Col.2 lines 14 – 19, col. 4 line 63 – col. 5 line 7) Parker et al. teaches an assembler, which is a software program that produces a machine language code file that causes a microprocessor under test to perform a desired activity. Nowhere in Parker et al. is it disclosed that the assembler measures any quantity and provides the corresponding readings to the microprocessor. It is readily apparent that Parker et al. does not disclose an instrument that provides input stimulus and measurement readings.

Claim 1 also recites an instrument component further comprising a normal mode for running the instrument in live mode. The Office Action erroneously asserts that this feature is disclosed in Parker et al. at column 5 lines 11 - 12, column 6 lines 44 -49 etc. However, at the cited section the reference discloses the microprocessor circuitry is used for testing. If this were likened to the instrument component, as in the Office Action, then logically it can be concluded that this instrument component would be running the instrument (assembler) according to claim 1 of the applicants' invention. However according to Parker et al. the converse is true wherein, it is the assembler that produces the machine code file that runs the microprocessor. Therefore it is submitted that Parker et al. does not teach the instrument component further comprising a normal mode for running the instrument in live mode. Moreover, according to applicant's claimed invention the same instrument component that is communicatively coupled to an instrument should be capable of operating in a virtual/normal mode in order to run the test with the given instrument in a simulation/live mode respectively. However Parker et al. teaches two separate systems namely a computer system and a simulation system, for running the tests in different modes. A microprocessor model in the simulation system

which has no operating system runs the test in a simulation mode while a hardware implementation of the microprocessor with an operating system runs the test in a normal mode (Col. 6 lines 47 – 53). As such an instrument component that has a virtual mode that runs the test component with the instrument in simulation mode and the instrument component further comprising a normal mode for running the instrument in live mode is not taught by Parker et al. Therefore it is clear that an identical invention as shown in the subject claims is not disclosed by the cited reference. Hence this rejection should be withdrawn with respect to independent claim 1 and all the claims that depend from it.

## II. Rejection of Claims 10, 15 - 17 and 19 - 21 Under 35 U.S.C. §102(e)

Claims 10, 15 - 17 and 19 - 21 stand rejected under 35 U.S.C. §102(e) as being anticipated by Parker et al. (U.S. 6, 112, 312). This rejection should be withdrawn for at least the following reasons. Parker et al. fails to teach or suggest each and every element of the subject claims.

As stated supra, the claimed invention generally relates to test systems and in particular to a test executive software system and a method for developing tests to verify the functionality of industrial control modules. To this end, independent claims 10 and 20 recite similar features namely, means for executing the at least one test template file in simulation mode to determine if the at least one test template file operates properly. The tests upon being compiled and linked are then run in a virtual mode for debugging. Only upon debugging and verification, are the tests run in live mode. Parker et al. nowhere discloses this aspect of the claimed invention. On pages 4 and 5 of the Office Action the Examiner contends that Parker et al. discloses this feature of the claimed invention. However at the cited portion (Col. 10 line 66 - Col. 11 line 11) Parker et al. teaches that when the test code is executed by the simulation system, the microprocessor under test writes a successful test program execution message to I/O ports. This implies that the test is being run in the simulation system as a means to test the microprocessor but not as a means for debugging the test code. From the disclosure of Parker et al. (Col. 2 lines 3-5, lines 50-53 etc.) it is clear the cited reference does not contemplate determining if the test template file operates properly. Parker et al. does not suggest or

teach means for executing the at least one test template file in simulation mode to determine if the at least one test template file operates properly. In view of at least the foregoing this rejection should be withdrawn with respect to independent claims 10 and 20 and all the claims that depend from them.

# III. Rejection of Claim 6 Under 35 U.S.C. §103(a)

Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Parker et al. in view of Microsoft Computer Dictionary (Microsoft). It is respectfully requested that this rejection should be withdrawn for at least the following reasons. Microsoft does not make up for the aforementioned deficiencies of Parker et al. with respect to independent claim 1. Specifically Microsoft fails to teach or suggest a test executive software system for performing tests, comprising an instrument that provides input stimulus and measurement readings; and an instrument component that has a virtual mode that runs the test component with the instrument in simulation mode and the instrument component further comprising a normal mode for running the instrument in live mode.

Therefore, the subject invention as recited in independent claim1 (from which the claim 6 depends) is not obvious over the combination of Parker *et al.* and Microsoft. Thus it is respectfully requested that this rejection be withdrawn.

## IV. Rejection of Claims 11 - 13 Under 35 U.S.C. §103(a)

Claims 11 - 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Parker et al. in view of Microsoft Computer Dictionary (Microsoft). It is respectfully requested that this rejection should be withdrawn for at least the following reasons. Microsoft does not make up for the aforementioned deficiencies of Parker et al. with respect to independent claim 10 (from which the claims 11 - 13 depend). Specifically Microsoft fails to teach or suggest a test executive software system for performing tests, comprising means for executing the at least one test template file in simulation mode to determine if the at least one test template file operates properly. Therefore, the subject invention as recited in independent claim10 (from which the claims 11 - 13 depend) is not obvious over the combination of Parker et al. and Microsoft. Thus it is respectfully

requested that this rejection be withdrawn.

### CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [ALBRP175USA].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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